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LACERATIONS OF THE CERVIX UTERI AS A CAUSE OF UTERINE DISEASE.[1]

BY W. H. BAKER, M. D.

We are indebted to Dr. T. Addis Emmet for first recognizing this lesion as a cause of uterine disease, and for first demonstrating to the profession a ready and efficient means of cure by his operation of November 27, 1862. This operation as performed fourteen years ago is practically the same as that performed by him to-day, and by those who from him have learned to relieve so many women suffering from the effects of this injury.

That the above accident is a very frequent cause of uterine disease is indicated by the figures produced by Dr. H. T. Hanks at a meeting of the Medical Society of the County of New York, September 28, 1874, when he was able to show that of all the uterine cases treated by him at the Demilt Dispensary in five months of service, numbering two hundred and twenty-nine, in nineteen, or over eight and four tenths per cent., he recognized the above lesion.

During a residence of eighteen months in the Woman's Hospital of New York, of the four hundred and thirty-five uterine cases received for treatment, thirty-nine, or nearly nine per cent., were of the above class. Since then, of the one hundred and eighty-one cases which I had treated up to September, 1876, in private and hospital practice, eighteen, or nearly ten per cent., belonged to the same class.

That this injury is not only of very frequent occurrence, but that it takes place to such an extent that it is followed in time by serious changes, all of which are directly dependent upon it, is still farther shown by the fact that at the time Dr. Emmet read his valuable paper upon this subject, some two years ago, he had already operated for the remedy of this difficulty nearly two hundred times.

Where so large a percentage of uterine cases can be traced to one exciting cause, as we have here pointed out to be the fact with regard to the subject of our paper, it will certainly be well for us to make the matter one for careful study, for close clinical observation, and for the

[1] Read before the Boston Society for Medical Observation, May, 1877.

minute record of cases, from which, taken collectively, we may be able to deduce laws which may aid us not only in the more satisfactory treatment of the patient after the injury is done, but which may also assist the accoucheur in his attempt to prevent the accident, or in the early restoration of the part to its normal condition.

It is with a view of aiding the above purpose that I present the following cases which have been operated upon by me during the past three years: —

Case I. A. T. entered the Woman's Hospital of New York February 24, 1874. She was a native of Ireland, thirty-five years of age. Married at nineteen, she gave birth to her first child one year afterwards, and a year following the second and last child was born, although she aborted twice subsequently. Both labors were quite rapid, and she dated her illness from the birth of her last child. She entered the hospital complaining of more or less bearing-down pain, and pain in the left groin extending down the thigh. Leucorrhœal discharge had been abundant for years. On examination the cervix was found low in the pelvis, and lacerated bilaterally to such an extent that the inner surfaces had rolled out and had become so hypertrophied that it was impossible with tenacula to restore them to their natural position. March 2d, the patient being etherized, I operated for Dr. Sims by cutting away the hypertrophied tissue to that amount that the everted lips could be rolled back into their original position, where they were secured by five silver sutures. Ten days after the operation two of the sutures were found to have cut out, having been twisted too tightly; the remaining ones were removed. In a month from the time of her entrance to the hospital she was discharged cured, the slight gaping following the cutting out of the two sutures having healed by granulation. Unfortunately this case could not be followed farther.

Case II. S. W. was admitted to the Woman's Hospital December 8, 1873, suffering from sharp pains in the back and through the lower part of the abdomen, which were greatly increased by walking. She also complained of a leucorrhœal discharge of a thick and tough consistence. The patient was thirty-five years of age, had been married twelve years, had had one miscarriage at six months, and subsequently a child after a rapid labor, ten years before her admission to the hospital. For this latter period she had suffered from the above symptoms, and although not entirely incapacitated for work, yet her usefulness was greatly impaired by constant suffering. She had during this time been treated for "ulceration of the womb" by several physicians, who, mistaking the effect for the cause, had failed to benefit her. On examination the uterus was found retroverted, its cervix lacerated on the left side down to the vaginal junction, and very much hypertrophied, the surface being covered with the discharge already described.

One week after the patient's admission to the hospital I operated upon the case for Dr. Emmet, for the closure of the lacerated cervix. The patient being etherized this was successfully done, the hæmorrhage, which was considerable, being entirely controlled as soon as the sutures were introduced. She made a good recovery from the operation, and then, the uterus being replaced and some intra-uterine applications of impure carbolic acid being made, the womb gradually regained its proper position, and the patient, feeling entirely relieved of her suffering, was discharged from the hospital, cured, January 17, 1874. She was seen four months afterwards, and had continued well. The uterus was then in a normal position, and the cervix looked perfectly natural, no evidence of the operation being visible.

Case III. M. B. was sent me from the western part of the State, May 20, 1874. She was an American, thirty-eight years of age. Married at eighteen, she had given birth to seven children, and had had four abortions, all of which had occurred since the birth of her third child, twelve years before. This third labor was unlike all the others in that it was very rapid, the pains being severe and forcible, with almost no intermission. She recovered very slowly, and then began to complain of sharp shooting pains through the lower part of the abdomen, dragging and bearing-down pains, and burning sensations in the uterine region. There was also present an excessive leucorrhœal discharge. All these symptoms gradually but constantly increased. The nervous state, too, was most deplorable. She was unable to sleep at night or to keep quiet by day, crying at the least opposing circumstance. I can truly say that I have seldom seen a patient whose nervous system was in such a shattered condition. The patient had been under almost constant treatment for so-called ulceration of the womb for four years before coming under my care, and had been confined to the bed for the greater part of that time. In examining the case I found the laceration of the cervix to be confined to the left side, but had extended through the vaginal junction, having gone into the cellular tissue beyond; the everted surfaces were greatly hypertrophied, and had undergone cystic degeneration. The cervix was presenting at the vulva, the whole organ being retroverted. The perinæum had been torn down to the sphincter muscle, and a large cystocele had formed. It was found necessary to give the patient some preparatory treatment on account of the cystic degeneration of the cervix, before performing the operation, which was done June 16th, or in about a month from the time when she was first seen by me. The laceration was the most extensive one that I had ever operated upon, requiring seven sutures to close it, the line of union being fully one and a half inches long. The result was highly satisfactory. When the sutures were removed perfect union was found, and within a month

from the time of the operation the patient could walk one and a half miles comfortably. Subsequently operations were done for the cystocele and ruptured perinæum, after which, the uterus having regained its natural position, the patient was sent home, cured. She has been heard from from time to time since, and has continued to do well, being able to keep a house full of boarders, doing all the work herself, including the washing and ironing. She has been once pregnant since, but fearing a return of all her troubles with the birth of another child, without any advice she caused an abortion at the third month.

Case IV. B. T. was sent me for treatment May 14, 1875. She was an American lady, twenty-eight years of age, and had suffered since the birth of her first child, which was delivered with instruments after a labor of ten hours; four years previous to the above date her second and last child was born naturally, one year after the first. The complaints made by this patient were not unlike those in the preceding cases, except that there was a much greater inability to regain strength after her first labor, and a tendency to the most violent attacks of headache on the slightest exertion or even after being present where there was any confusion or noise. The physician who kindly referred the patient to me told me that for some time he had attempted to heal an eroded condition of the os uteri by various applications, and that although she seemed better generally for the time being, yet the erosion had not healed. As the cervix was brought into view by the aid of a Sims speculum, the eroded condition already referred to presented itself, which, by rolling into the canal with a tenaculum in each hand, showed itself to be the lining membrane of the canal, everted after the slight bilateral laceration of the cervix which had undoubtedly taken place at the birth of her first child. There was also a laceration of the perinæum and the remains of an old attack of cellular inflammation of the left broad ligament, which held the uterus somewhat firmly to that side. The operation had to be delayed for more than four months, or until the adhesion on the left side of the uterus had disappeared. The operation itself did not differ from those already described, except that on account of the very anæmic condition of the patient the precaution was taken to use a uterine tourniquet. She recovered without a bad symptom, and has since enjoyed good health. When I met her some months afterwards she told me that she was making up for lost time, saying that she had gone to six entertainments in as many consecutive evenings without feeling any ill effects therefrom.

Case V. M. S. came to me November 15, 1875, complaining of great leucorrhœal discharge, which had annoyed her since the birth of her first and only child, two years before. She was a native of this country, and was twenty-three years old. Her labor occurred at seven months. She remembered none of the details, as she was uncon-

scious for four days. The child was born without forceps being applied, notwithstanding that the patient had repeated convulsions for forty-eight hours previous to the delivery. In twelve days after her labor she attempted to get up; but, as she expressed it, the "blood flowed so freely that she was obliged to keep her bed for some time longer." Her strength returned gradually, and since getting up from her labor she had suffered no pain of any kind, and would not have presented herself for treatment except for the annoyance of the discharge referred to above. On examination, the cervix was found to be torn very irregularly on the left side, quite through the vaginal junction. The surfaces of the laceration had rolled out, and looked highly injected. There was very little hypertrophy and no cystic degeneration. It was difficult in this case to make the patient understand the importance of an immediate operation. It was, however, soon consented to and performed, being similar in its details to those already described. Since then she has been free from the previous annoyance, and we feel sure saved herself a great deal of suffering which must have followed had not the operation been done.

As the remaining six cases do not present features unlike those already given, we will not lengthen this paper by a prolonged recital of them here, but taking them together with those which are now under treatment awaiting an operation, and those in which it has thus far been found impracticable to perform the operation, we will state some points in their history which are of special interest.

We have, then, the histories of eighteen cases where this lesion has occurred. These include all the cases of this class which have been treated by me in private or hospital practice up to September, 1876. To these we may add the two cases upon which I operated in the New York Woman's Hospital, the full histories of which I retained, giving us twenty cases in all, from which we derive the following facts.

In ten cases the injury occurred with the first labor, and in an equal number at some other than the first confinement.

In ten cases the labor was rapid and the pains usually very severe. In six others the labor was more or less delayed, and finally accomplished by the aid of instruments; in one, the waters having been evacuated two weeks before, the labor was much prolonged; in one the labor occurred at seven months, and after two days of convulsions the child was born naturally; in another the labor was normal; and in the remaining one the character of the labor was not specified.

In all instances we have reason to believe the presenting part to have been the head. In fourteen the laceration was of the left side of the cervix alone. In the remaining six it was bilateral. In sixteen the injury had been followed by some structural change or malposition, directly or indirectly dependent upon this accident, and in the remain-

ing four time enough had not elapsed since the injury for such change to have taken place, and the operation was performed to restore the cervix to its natural condition before such changes should be inaugurated.

In all the cases except one there was an abundant leucorrhœal discharge, which was characterized as thick and tough, and was compared to the white of an egg. In thirteen there were irregularities in menstruation, and an equal number had been treated previously for so-called "ulceration of the womb" or erosions.

Eleven of the cases were operated upon with the most satisfactory results.

In reviewing the foregoing facts it is interesting in the first place to notice the character of the labor in which this accident occurred. In half of the cases this was denominated as rapid and the pains usually very severe; or in other words we understand the force of the uterine contractions to have been so great, even from the commencement of the labor, that time enough was not given for the full dilation of the os, and the rent was made at the point where the greatest amount of force was brought to bear. In three fifths of the remaining cases the labor was prolonged, and finally accomplished by instruments. If, then, there existed any rigidity about the os at the time the forceps were applied, these may have been the immediate cause of the laceration.

It would seem, then, from our cases, that we are not to look for this accident most frequently among the tedious, difficult, or instrumental cases, but rather among those where from the rapidity of the labor we have been led to congratulate ourselves that the patient has passed favorably through her trial.

It is interesting, again, to see the frequency with which the laceration took place on the left side of the cervix. This same fact was observed and most satisfactorily explained by Dr. George T. Harrison in the December number of the *Virginia Medical Monthly* of 1874, where, referring to the mechanism of labor, he shows that with the most frequent form of labor, occurring with the occiput directed to the left, more or less anteriorly, we may look to the above point for the most frequent place of injury. Again, Dr. Emmet, in his most valuable article on this subject, published in the November number of the *American Journal of Obstetrics* for 1874, shows that although lacerations of the cervix most often occur in the median line anteriorly, yet on account of the raw surfaces being kept in contact by the lateral pressure of the vagina these lacerations heal, and that "in practice we have chiefly to deal with the consequences of lateral lacerations," because of the great tendency of the tissues to roll out.

It is still farther interesting to see from our summary of cases that in every instance where sufficient time had elapsed from the occurrence

of the injury some structural change or misplacement had followed. When we consider that the connective tissue of the cervix uteri is in excess of the muscular tissue, we can understand at once why its proper involution should be so readily interfered with; for, as shown by Dr. Lott,[1] and referred to in the article by Dr. Harrison, already noticed, the very condition of tetanic contraction of the body of the uterus, where the muscular tissue predominates, which so influences its further nutrition and consequently its involution, would have little effect upon the cervix. We can easily see how materially affected the proper involution of this lower segment of the uterus would be by the occurrence of a lateral laceration of its tissues, and in fact where this injury has extended through or even to the vaginal junction the cervix is very apt to remain in a state of subinvolution. The process of eversion or rolling out of the cervical canal, which soon follows the puerperal state where this accident has happened, and which is so fully described by Dr. Emmet in the article to which we have already alluded, brings the lining membrane of the canal in contact with the posterior wall of the vagina, the friction against which soon occasions an abrasion of this tender membrane. The constant irritation keeps up as constant a hyperæmia of the part, which in its turn favors the hyperplasia that is almost sure to follow.

There is still another condition which follows upon this state of eversion of the cervical canal, namely, that of cystic degeneration of the cervix. By these terms are meant the formation of numerous cysts from the muciparous glands of the canal, the mouths of which have become occluded by their exposed and unnatural position. It must be evident to all that the combined influences of the above conditions, increasing the size and weight of the cervix, tend to produce some misplacement of the uterus.

We regret to observe that in more than one half of our cases the patient had been treated more or less persistently for so-called "ulceration of the womb," and had derived not only no permanent benefit from the treatment, but had been made worse, as the increased suffering proved. In these cases when a mass of cicatricial tissue is formed over the cervix as a result of the frequent applications of caustic, which is very likely to be the solid nitrate of silver, the nerve filaments becoming compressed, the patient is kept in a state of almost constant suffering. Dr. Emmet, in his pamphlet on the Surgery of the Cervix in Connection with the Treatment of Certain Uterine Diseases, compares this condition to an irritable stump where some nerve filament has been involved in the cicatricial line after an amputation.

Dr. Clifton E. Wing has well pointed out the frequency with which this lesion of the cervix is mistaken for ulceration, in an article in the JOURNAL of March 16, 1876.

[1] Anatomie und Physiologie des Cervix Uteri. Von Dr. G. Lott, 341.

Having reviewed some of the most interesting points brought out by our summary of cases, let us inquire a little more fully into the rational and physical signs present in these cases as a means of diagnosis. At the time of labor neither of these classes of signs is at all well marked, for it is the secondary effects of the laceration which make the rational signs the most noticeable, and when the accident occurs the tissues are so soft that it would not be readily recognized even by the touch; therefore the injury is likely to pass unobserved at this time, unless, as Dr. Emmet has shown, the tear has extended beyond the cervix into the vaginal and cellular tissues, and has occasioned an unusual hæmorrhage.

The first thing which attracts our attention in the list of symptoms is the tardy recovery of the patient, a "bad getting up," as she expresses it, and when more than the usual time has elapsed, and she thinks she should be able to be about, she feels somewhat discouraged on account of her inability to stand; or it may be that with the attempt to walk more or less hæmorrhage is noticed. As time goes on, intercourse may be complained of as being painful, or perhaps followed by a slight show; there is ever present backache, a sense of weight in the pelvis, pains extending down the thighs, a sensation of heat or burning in the hypogastrium, irregularities in menstruation, and throughout the whole there persists a more or less abundant leucorrhœal discharge. As the nervous system is continually taxed by the foregoing symptoms, it finally claims its full share in the trials to which the patient is subjected, and she is probably by this time a confirmed invalid, and may indeed think herself fortunate if she is not confined to her bed, a truly deplorable wreck.

The physical signs change very much, of course, as the case progresses. At an early stage we are struck by the size and softness of the cervix, and by the aid of the speculum we see at once the everted membrane of the canal, the epithelial layer of which is often abraded; later we have the large flattened, appropriately termed mushroom cervix, with its firmer tissue and shot-like feel; and still later we find the cervix hypertrophied, the tissue firm and indurated, and if it has been treated with caustics the surface covered over with cicatricial tissue and the substance as hard as a piece of granite. Or the case having been left to itself the epithelium becomes abraded, and the constant friction to which the part is exposed keeps it constantly irritated, so that the appearance might readily be mistaken for that of malignant disease. To all these appearances in this latter stage we might have added the various malpositions which have been occasioned by the change which has taken place in the cervix.

Obviously a case of this class must go on indefinitely unless measures are taken to repair the injury. Nor does the long-looked-for menopause prove that haven of rest anticipated; for the misplacements

which have been induced by this accident may remain and still exert the most deleterious influence on the health of the patient. It is sometimes necessary to advise some preparatory treatment before resorting to the operation, as in Case IV., where the evidence of an attack of cellular inflammation remained, which was removed by the use of the hot vaginal douche and the local application of the tincture of iodine. Or if the case has been one of long standing and the cervix is in a condition of cystic degeneration this will require attention, in order that when the everted surfaces of the canal are rolled back into position again at the time of the operation, none of these little cysts may be included in the wound.

Dr. Emmet's operation, which he so fully describes in his paper, is certainly one of the most practicable and highly satisfactory known in the department of uterine surgery. It consists simply in denuding the surfaces of the laceration and in bringing them together with silver sutures, which are to be left in place for eight days or more, as the case may be.

The dangers of the operation are primarily hæmorrhage, which can be usually controlled by the use of the uterine tourniquet, or subsequently by the twisting of the sutures; and secondarily from peri-uterine inflammation, which, if proper care is used, will very rarely happen.

From the fact that this injury has been shown to be of such frequent occurrence, practitioners cannot be too strongly impressed with the importance of examining all patients who have been confined before they are discharged from their care with the assurance that they are perfectly well again, and by thus doing they may sometimes save their patients years of suffering by rectifying the damage before the long train of diseases consequent upon this lesion shall have shown themselves.

ALBUMINURIA AT THE SEVENTH MONTH OF PREGNANCY; SEVERE GASTRALGIA; INDUCED LABOR; RECOVERY.[1]

BY S. L. ABBOT, M. D.

I WAS called on the night of July 2, 1876, to Mrs. S., a young lady, in her second pregnancy at the seventh month. She was suffering from severe pain just below the ensiform cartilage, paroxysmal in its character, coming on several times during the day, and lasting from a few minutes to half an hour or more. In the intervals there was no local soreness nor other symptom. The pain had been troubling her more or less for several weeks, being very insignificant and infrequent at first, but later increasing in frequency, severity, and duration. The weather had been intensely hot, and the patient had undergone a good deal of

[1] Read before the Obstetrical Society of Boston, April 14, 1877.

fatigue in a vain search for a suitable country residence during the summer. Her appetite was rather poor, and her strength was a good deal exhausted. In the intervals between the attacks, however, she took a moderate amount of food without oppression, although occasionally the coincidence of an attack with the taking of a meal had been such as to excite suspicion that the pain was due to indigestion. The patient was a lady of nervous temperament, and had suffered much in the course of her life from facial neuralgia. She had been taking, under the advice of a physician now out of town, moderate doses of quinine.

On the present occasion the pain was entirely relieved by small doses of morphine, given at short intervals for two hours, and did not return during the night.

The morning after the patient was found suffering from nausea caused by the morphine which she had taken, and the pain had returned. There was the same entire relief, however, between the paroxysms, and she was able to take a reasonable amount of nourishment after the nausea subsided. In the hope of preventing this unpleasant symptom the morphine was given in combination with a moderate quantity of chloral and bromide of potassium without producing nausea, but the relief was only temporary, the pain becoming more frequent, more severe, and of longer duration, leaving her much exhausted, and with little appetite. In the intervals between the attacks quinine was administered, with stimulants.

On the 7th it was learned, on inquiry, that the urine was very scanty, and on examination it was found to be heavily loaded with albumen, dark and smoky, with a specific gravity of 1028. I find no memorandum of microscopic examination. There was no œdema, nor had there been any, but the patient was constantly bathed in a profuse perspiration. The attacks of pain had somewhat changed in character, and amounted to agony. Starting from the epigastrium it extended across the left chest, through to the scapulæ, and down the left arm to the elbow. It also seemed to affect the diaphragm, as free expansion of the chest was prevented, causing considerable dyspnœa. On auscultation, however, vesicular breathing could be heard to the very base of the lungs, even at the height of a paroxysm. The heart's action was quickened and feeble, but there was no sense of palpitation. Stimulants were given freely, and ether was inhaled as occasion required.

From the first, frequent inquiry had been made as to the existence of uterine pain, but none was complained of. By laying the hand on the abdomen, however, during a paroxysm, the uterine fibres could be felt in places gathering up into knots by what appeared to be a limited contraction. On directing the patient's attention to this symptom, she recognized at the points indicated a sense of constriction, but no pain.

This symptom was noticed from the first, but had not increased, indeed was almost lost sight of in the severity of the other symptoms.

It being now apparent that the patient's life was seriously compromised, the question of bringing on labor presented itself with great urgency, and it was accordingly determined, on consultation in the evening with Dr. Storer, to resort to it at once. An examination showed that the os uteri was dilated to the size of a quarter of a dollar, and that the membranes were quite tense. As the patient, however, at this moment was free from pain and disposed to sleep, I deferred rupturing the membranes until she had had a few hours' rest. She slept more or less for four hours, and at the end of that time the membranes were ruptured, and labor quickly followed, the child being born within two hours. It was noticeable that the gastralgia, which had returned before the membranes were ruptured, disappeared entirely during labor, as soon as uterine pain came on. The child was born living, but died at the end of twelve hours, not being able to retain any nourishment.

Scarcely had the uterus contracted after the expulsion of the placenta when the epigastric pain returned with unmitigated severity. The patient was extremely exhausted, the pulse very feeble and frequent, and she was in a perfect bath of perspiration, which saturated her linen and the sheet beneath her, her hands being cold and clammy, as if soaked in cold water; she was evidently in a very critical condition. The *mean* temperature of the atmosphere during the first three days of attendance was over 81° Fahrenheit, and for the next three, 74°, 75.7°, and 72°,— a circumstance which greatly aggravated the patient's sufferings. Brandy was given at short intervals, and ether was freely inhaled. It was not until the end of four hours that I felt it safe to leave her side. She rallied, however, during the day, and by evening was quite free from pain, and stronger.

The patient required the catheter for two or three days, and on the third day complained much of headache, as from a band tightly drawn across the forehead. A singular symptom, which existed for several days after labor, was that the air seemed to the patient to be full of beautiful objects, mostly in the form of flowers, all of a brilliant purple color. She expressed herself in strong terms of admiration of these visions, which were so vivid to her that she said it seemed almost impossible that nobody else could see them, although she was fully aware that they were optical illusions. After the first day she took nourishing food freely, and there was no return of the peculiar pain.

The fourth day after confinement the urine was much clearer, strongly acid, of specific gravity 1010, and slightly opalescent only when tested by boiling and nitric acid. The microscope showed abundant crystals of uric acid and two small fragments of granular casts; on the day before albumen was found in large quantity by boiling.

The patient gained steadily from this time, having no return of the gastralgia, but suffering a good deal from facial and temporal neuralgia, which assumed a somewhat periodic character, its intensity being greatly increased in the evening and night. On the 4th of August, however, she declared herself as well as she had ever been in her life, and her health has continued excellent to the present time.

The only case which I find on record similar to the above is Case XLIX. of Dr. Elliot's Obstetric Clinic. In that, however, the gastralgia seems to have been less remittent than in mine, perhaps because in the latter the symptoms were not allowed to proceed to the same extremity before labor was induced. In Dr. Elliot's case there was, as in mine, "no œdema nor puffiness of lower eyelids, or of any part of the body." The urine contained a very large quantity of albumen, "but the specific gravity was high, 1032; granular casts. There were no head symptoms, disturbances of vision or hearing. She complained of pain over the epigastrium, and had been vomiting sour fluid." Labor was induced with some difficulty, and a dead child was born. In this case, as in mine, the albumen disappeared very rapidly from the urine, being hardly noticeable on the second day after labor, although it returned in increased quantity two or three days later. There is a curious coincidence also in the cerebral symptoms at this stage. The gentleman in immediate attendance upon the patient, Dr. Mitchell, of Brooklyn, says, on the afternoon of the 8th, the fifth day following labor, he "was called because of the appearance of new symptoms. She says that she sees a great many beautiful sights of fairies in processions, and weddings, and is astonished that others do not see them." These fancies, however, passed away in a few hours, and convalescence was speedily established; the urine, however, remained at a low specific gravity.

TRANSVERSE FRACTURE OF THE PATELLA.

BY IRA BROWN, M. D., WELLS RIVER, VT.

In *Braithwaite's Retrospect* for January, 1877, is the report, by Dr. W. T. Grant, Royal Infirmary, Edinburgh, of a case of transverse fracture of the patella treated by means of adhesive straps and weights, exact apposition of the fragments being thereby secured with good results. Dr. Grant also mentions three cases reported by Dr. Hornbrook, of America, treated by adhesive straps alone, the result being bony union in each case.

I send you the report of a case treated by myself previously, which, if you deem it of sufficient interest to the profession, please give a place in your journal.

H. D., a healthy Irishman, age twenty-three, residing in South Bos-

ton, October 24, 1876, while employed as a farm hand in Ryegate, Vt., slipped and fell, receiving a transverse fracture of the patella nearly through its centre. I saw the patient soon after the accident, and found the two parts of the bone about one inch asunder.

Taking three pieces of elastic web, each three inches long by three fourths of an inch wide, I doubled them to secure greater strength, and then sewed to each end a piece of adhesive plaster ten inches long. While an assistant pressed together the two parts of the bone, one of these strips was carried along the front of the limb, the elastic web being brought on the stretch over the knee, the other strips being similarly placed on either side of the limb, which was then placed on a well-padded curved splint (Goodwin's), raised at the foot, and a roller lightly applied around the leg and splint.

On visiting the patient the following day I found the middle elastic strap a little loose and the fragments of the bone about one line apart. Removing this strap, I took an adhesive strap two and a half feet long, placed the middle above the patella, and while an assistant pushed the upper fragment down to its fellow carried the two ends downwards and backwards to the calf of the leg with sufficient force to hold it exactly in place. In like manner a second strap was carried from below the patella upwards and backwards to the thigh. Four other shorter straps having been so applied as to hold the fragments firmly in place, the splint was replaced as before.

On removing the splint at the end of three weeks, firm and exact union was found to have taken place. The adhesive-plaster dressing was continued, and passive motion commenced.

Mr. D. returned to Boston December 24th, at that time using crutches. I learn that he went to one of the Boston hospitals in February, and the surgeons upon an examination declared that no fracture had existed.

I will only add that in my opinion the adhesive straps alone, without aid from elastic bands or splints, would be sufficient to secure firm, bony union in most cases of transverse fracture of the patella.

RECENT PROGRESS IN THERAPEUTICS.

BY ROBERT AMORY, M. D.

The Abuse of Morphia.[1] — An editorial calls attention to the alarming prevalence of *morphinism*, or "the same craving for morphia" that tipplers have for alcohol. When the effect of morphia has passed off the patients are subject to a deep melancholia with suicidal tendency, and generally complain of a gnawing and tearing pain in the left hypochondriac region. In commenting on these observed facts the writer,

[1] London Medical Examiner, July 5, 1877.

though admitting that there is sufficient authority from eminent clinical observers for the subcutaneous administration of morphia in constantly increasing doses for the relief of pain, says that one point is very often overlooked, namely, that the prolonged use of morphia produces the symptoms which under favorable circumstances it also relieves, hyperæsthesia, paralgesia, insomnia, mental depression, etc. He calls attention to another well-known fact: the lower we descend in the animal scale and the more imperfect the structure of the brain becomes, the more morphia excites reflex irritability, until in the frog this irritability is replaced by tetanus, just as if strychnine had been administered. So, also, we find among individuals of nervous temperament that the excitability following the use of morphia is very great and may even resemble that of delirium: the negro or Malay intoxicated with opium becomes boisterous, pugnacious, and convulsed. From the very fact that neuralgia is more commonly met with in individuals of exalted nervous temperament, the use of morphia in these cases should require great caution. The apparent increase of fat in those persons who have been under morphine treatment for the relief of pain is probably due to the property which this drug possesses of diminishing the complete combustion of hydrocarbons, and, as is the case also with alcohol, this fatty accumulation is not normal but abnormal, and does not tend to the well-being of the patient. The attention of physicians in this country is called to the above remarks, because undoubtedly the use of morphine, especially by the hypodermic method, to allay pain is so successful and prompt that we are eager to use it, when perhaps the administration of a powerful dose of quinine in neuralgia, or phosphide of zinc and extract of nux vomica in shingles, or a local application of carbonate of soda to the cavity in a carious tooth will not only act as promptly, but will also prevent the recurrence of pain. Again, in many cases of diarrhœa which is the result of an intestinal irritation caused by impaction of hardened fæces, instead of relieving the pain caused by the presence of these fæces in the colon by the free use of opium and morphine, a good old-fashioned dose of epsom salts or castor-oil, with a dose of opium to control the pain and excessive peristalsis, or an enormous enema of flaxseed tea or olive oil and hot water will bring away the offending substances and avert a severe case of catarrhal inflammation of the colon, and also relieve the pain of tenesmus. To illustrate these latter remarks: a patient under treatment for dysentery had persistent watery diarrhœa, followed by mucous and bloody mucous discharges for three weeks. He was treated by large doses of laudanum by the mouth and by the rectum. He was also put on a milk diet and given large doses of powdered bismuth and chalk mixture. The character of the discharges not improving, and there being no report of any alvine discharge for two

weeks, it was concluded on seeing him the second or third time and after a careful examination by palpation and percussion that there were some fæcal lumps somewhere near the caput coli, the presence of which caused the intestinal irritation and constant pain. I ordered the patient to take a few swallows of Hathorne spring water, and to his great satisfaction in a few hours he passed several black scybala, and in the course of the next twenty-four hours, on the repetition of the spring water quite a large quantity of hard, blackened fæces. The constant pain, which had been controlled only by large doses of opium for the twenty previous days, immediately ceased. Other similar cases are common enough, but serve to illustrate that pain is often a symptom of danger, and if this is quelled by anodynes it may often prevent us from resorting to expedients which will remove the cause of pain and save our patient from serious chronic disease.

M. Calvet[1] presents (1) a physiological research of the action of morphine upon the various functions of the organism; (2) a clinical study of morphine as a therapeutical agent, especially in the relations of acute to chronic morphinism. In the first, he observes that both intravenous as well as subcutaneous injection of the hydrochlorate of morphine accelerates respiratory movements succeeded by a period of retardation, and produces sometimes a momentary arrest or respiratory syncope. The same relative effects occur with the cardiac movements: at first, accelerated followed by retarded pulsations; sometimes even cardiac syncope. During this time animal heat exhibits analogous phenomena, namely, the elevated is followed by lowered temperature. In fact, the absorption of morphine, whether by intravenous or subcutaneous injection, produces a very marked influence upon the reflex actions. In certain cases the period of exaltation does not occur, but immediately after the administration of the drug the temperature becomes lowered, and the respiratory and cardiac movements are slower. Though he has not finally completed his researches, M. Calvet advances the opinion, "that the above phenomena are dependent upon the integrity of the connection between the pneumogastric nerves and the encephalon, for if these two nerves are severed the above-named effects do not occur, but only the ordinary sequelæ observed after this section." In the second portion of this thesis M. Calvet offers the following interesting observations on chronic morphinism: Nutrition is deranged, the animals becoming emaciated; for instance, an animal who had received during a month a total amount of 3.52 grammes (twenty-five grains) of hydrochlorate of morphia lost almost half his weight, became torpid, had dilated pupils, walked with a jumping step, as if he had exalted sensation in the plantar surface. In this and other

[1] Thèse de Paris, A. Delahaye, 1877. Étude experimentale et clinique sur l'Action de la Morphine.

animals the secretions of saliva and urine were very much diminished; they died more often from marasmus or defective nutrition, but sometimes from convulsions as well-marked as those which are observed in poisoning by strychnine. The anatomical post-mortem lesions observed in these cases were in the arterial encephalo-medullary region, and apoplexy in the vessels of the heart and stomach. Morphine was found in all the organs of the body, but not in the saliva or urine.

On a New Preparation of Iodine.[1] — This preparation contains in one fluid drachm of liquor twelve grains of cinchona flava, one grain and a half of iodine in the form of hydriodic acid, and one grain of protoxide of iron. The tannin contained in the bark does not precipitate nor change color, either by time or exposure to light; by this fact the author contends that the mixing of the above ingredients forms a definite compound different from that usually observed in pharmacy, especially in view of the fact that these same substances otherwise combined behave quite differently. This preparation has been prepared also by Messrs. Melvin and Badger of Boston, and the above statements are well substantiated from my own experience; the mixture, however, does not have an agreeable taste, but does not leave the disagreeable sensations so often complained of by patients taking potassium iodide. The cases in which this combination has been found most useful were for the most part those of secondary or tertiary syphilis, particularly those in which mercury had been lavishly used or "abused, cases in which it was difficult to determine to what extent the diseased condition was due to syphilis, to the abuse of mercury, or to a combination of both." Its use is also most beneficial in all cases where a prolonged action of iodine is desirable and when its depressing effects should be avoided. Thus, it produces a favorable constitutional influence in severe epidemics of boils, in cases of scrofulous diathesis, in anæmia, and in glandular enlargement. "Some of these, intolerant of some of the officinal preparations of iodine, tolerated and were benefited by this." Bearing in mind Melsen's observations and experiments on the use of iodine preparations, Mr. Christopher states that "in patients who had taken mercury to salivation, but from whom all traces of the action of that drug had disappeared, salivation and tender gums reappeared almost immediately on the administration of iodide of potassium;" his notes of cases would seem to show that the use of the present preparation is not followed by any such inconvenience. Certainly in three cases in which the reporter of this abstract has used the preparation, the good effects of the drug claimed by Mr. Christopher have been very strongly marked: one of these was a case of secondary syphilis, a second was a case of suppurative abscess in a scrofulous diathesis, the third was a case of

[1] Practitioner, May, 1877. J. Crouch Christopher.

severe and numerous indolent boils; in one, three doses of iodide of potassium made the patient so uncomfortable that the present preparation was substituted for it, and in spite of its nauseous taste was well borne for several weeks. Only half a teaspoonful was given at first, and the amount was gradually increased until a teaspoonful was given twice a day.

Hydrobromic Acid[1] *in Tinnitus Aurium.*[2] — Following the suggestions occasioned by the use of this drug to reduce buzzing in the ears caused by large doses of quinine, Mr. Woakes advises its use in those cases where the above symptom is associated with a congested labyrinthine circulation without any well-marked objective morbid process. "The indication which should be regarded as most distinctly pointing in this direction is that the noises have more or less of a pulsating or, as the patient will describe it, a knocking character. The existence of vertigo, if present, will rather confirm the indication for the exhibition of the acid." Fifteen minims of the solution in water every four hours will rapidly relieve the symptom if it proceed merely from a congested labyrinthine circulation.

Chrysophanic Acid and Goa Powder.[3] — Goa powder is little else than dirty chrysophanic acid, and we therefore shall confine our abstract to the latter. The ointment is prepared by the solution of from twenty to forty grains of the acid in an ounce of lard. Its topical application three or four times a day produces no smarting and but slight and transient discoloration, no more than is seen in the complexion of a field laborer in the autumn. Care should be used to avoid contact with the lips and eyes. In a severe case of acne rosacea (turberculous variety), Mr. Balmanno Squire seems quite satisfied that a cure was effected by its energetic use, but occasionally he observed that the patient's face "became a little puffy, as if swollen."

Dr. Thomas E. Jones, however, has noticed that in two of his cases (ringworm) the topical application of this ointment (of the strength of which he does not inform us) was followed by inflammation of the skin and eyes, and discoloration of the skin; when the ointment was discontinued the inflammation gradually subsided. The testimony as to the value of this substance applied topically seems somewhat conflicting, but on the whole, if the local irritation is not too severe, cases of ringworm and non-parasitic skin diseases disappear under treatment. There is no doubt, apparently, that transient staining of the skin and nails follows its use.

[1] Fothergill's solution of hydrobromic acid is thus made: Add tartaric acid ℥xiii. ℥j. grs. xxxvii. to potassium bromide ℥x. ℥vj. grs. xxviii., and water ℥lxxx. Tartrate of potass. falls as a white precipitate, hydrobromic acid remaining in solution.

[2] E. Woakes British Medical Journal, June 23, 1877.

[3] British Medical Journal, 1877, pages 103, 134, 199, 245, 453, and 546. Medical Times and Gazette, 1877, pages 610 and 665.

Salicin, Salicylic Acid, and Salicylate of Soda.[1] — The absorption of salicylic acid in an hour after its ingestion appears sufficiently proved from the fact that it can within that time be detected in the serum (obtained from vesication) and in the urine by means of a salt of iron having a large proportion of oxygen, as, for instance, the perchloride, the sulphate of the protoxide, and the potassic tartrate; the addition of either, and especially the perchloride, to a dilute solution of salicylic acid in urine produces a salmon or a violet color, according to the amount of the acid present. Normal urine does not effect this change of color with the iron salts. A patient taking from one to four grammes (fifteen to sixty-four grains) of salicylic acid will pass urine exhibiting the violet reaction with perchloride of iron solution (at 30°). The presence of albumen does not interfere with the above reaction. Examination of the sweat and saliva proves that the drug is not present in these secretions.

Dr. Bälz, of Leipzig, experimented on a patient convalescing from typhoid fever with reference to the elimination of salicylate of soda. This man had epispadias, so that the urine could be collected directly from the ureters, and thus the precise interval between ingestion and elimination could be stated. The same reagent as above mentioned was used to detect the presence of the medicament. Eight and one half minutes after five grammes (thirty-six grains) of salicylate of soda had been swallowed, the reaction on the urine was observed; in twenty-three and one half minutes the notable effect on the sense of hearing usual in intoxication by this drug was noted; in ten hours transient albuminuria appeared, and the urine voided during twenty-four hours was double the quantity collected the day before the medicine was taken. Dr. Bälz remarks that salicylic acid is never eliminated earlier than twenty minutes after its ingestion; hence he infers that its salt is more rapidly absorbed than the acid. This inference seems to be supported by the clinical experience of other observers, who have remarked that larger doses of the salt are required than of the acid to produce the therapeutical effects.

[1] Jour. Anat. and Phys., July, 1877, Ringer and Burg. British Med. Jour.: Pinnock, Feb. 24, page 229; Squire, Mar. 10, pages 292, 428; Carafy, Apr. 28, 510; Macdonald, June 16, 738; Murchison, 746. Lancet: Carter, Jan. 6, 6; Bradbury, Feb. 10, 196; Pollock, 24, 272; Beeby, Mar. 3, 313; Sawyer, May 12, 683. Medical Times and Gazette: Lawson, Jan. 6, 8; Ringer, 9; Down, Cholmeley, 27, 89; Francis, Feb. 3, 115; Weber, 131; Ramskill and Sansom, Feb. 24, 198; Dale, May 19, 538; Jacob, May 26, 570. Practitioner: Napier, June, 410; Stuart, June, 425. Société de Gand, Bulletin, Villemin, Mar. 111. Mouvement médical: Jan. 20, page 33; Mar. 17, 24, pages 170, 185, 240. Thirion, June 2, 9, 16, 27, 30, pages 285, 223, 238, 252, 265, 275. Allgem. med. Cent. Zeitung: Stricker, Feb. 17, Apr. 28, May 2, 162, 404, 418; Kohlmann, Mar. 7, 219; Zeller, May 23, 503. Fleischer, Deutsches Archiv, Bd. xix., page 59, Weckerling 319. Allgem. Wiener Zeitung, Apr. 17, 138. Berliner Wochenschrift: Müller, Jan. 15, 29; Senator, Apr. 9, 199. Archiv der Heilkunde, xviii., Hft. 1, 3, 4, Bälz, pages 60 and 345.

Dr. Bälz obtained proof of the presence of this drug also in the bronchial secretion, but not in the saliva or sweat. Its subcutaneous injection causes local pain, sometimes abscess, and patients very decidedly object to this method of application; after enemata (five per cent. solution), salicylic acid or its salt is readily absorbed provided the injection be made cautiously and without violence.

From a careful review of the literature of the last six months the antifebrile action of this drug seems very uncertain. Sometimes a rapid fall of temperature after a sufficiently large dose is succeeded by a rapid and excessive elevation; quinine has apparently much greater influence in controlling high temperature.

It is quite evident that large doses (ten to twenty grains every two hours) of salicylic acid and its derivatives are required to produce relief to unfavorable symptoms; and yet caution must be exercised to avoid dangerous or poisonous effects, such as ringing in the ears or deafness, frequent pulse, high temperature, panting respiration, profuse perspiration, delirium, and imminent collapse. These signs of intoxication were observed by Weckerling in a patient having a severe pleurisy with effusion, but disappeared two days after the discontinuance of the medicine. The increase of bodily temperature noticed in the above case is corroborated by other clinical observers: for instance, in a case of rheumatism the temperature (axillary) was 101° before the administration of one hundred and twenty grains of salicylate of soda during twenty-four hours, but afterwards mounted to 103° and 104°; salicin was then substituted in the dose of fifteen grains every two hours, and hot fomentations were applied to the inflamed joints; in spite of this treatment, the temperature continued to increase until at the close of the third day it had reached 107°. The case was then treated by the cold pack; in two hours the temperature fell to 101.6°, in five hours to 101.2°, and the patient was very much relieved. The next day the temperature again rose, and, in spite of twenty-grain doses of salicin every hour, at noon the thermometer indicated 105.8°, and at four o'clock 106.8°. Then one hour's application of the cold pack brought the temperature down to 100.6°. Mr. Daruty, by whom the above case is reported, has used salicin successfully in many other cases of rheumatism, and seems fully convinced that in the above instance it proved of scarcely any value. The temperature became normal in about three weeks from the onset of the fever, and throughout the attack there was an absence of cardiac complications.

Dr. Russell concludes from his experience with this drug that in those cases of rheumatism in which the attack is destined to have only a short duration, and wherein the resisting force of the disease is low, salicylic acid will hasten the recovery, but reports five cases in which the same poisonous action as above observed resulted from the use of

the drug, and ceased in twenty-four hours after the medicine was stopped. In one of these cases, however, the patient did not recover, though the temperature decreased before death.

Mr. Carter reports two very severe cases of rheumatic fever, associated with the high temperature of 105° to 107° F., in which salicylic acid failed to reduce the fever but seemed to induce wild delirium. One of these patients died before the effects of a cold bath could reduce the high fever, and the other was treated by the bath, being immersed in water at a temperature of 93° F., which was gradually cooled during twenty-five minutes to 75° F. This was followed by a rapid fall of the body temperature and relief to the unfavorable symptoms. This patient recovered. His experience would lead him to infer that when rheumatism is associated with a high temperature (107° F.), no medication, either of quinine, digitalis, or salicylic acid, will remove this symptom. The cold bath alone will produce a favorable change.

In another case, in which twenty-five grains of salicylate of soda were given every two hours, the fever persisted even though signs of intoxication were observed; the patient did not recover from the high temperature for three weeks, and then was left with a stiff wrist.

Dr. Pollock mentions two intractable and fatal cases with continuance of high temperature.

Dr. Beeby mentions one fatal case of rheumatism, in which the persistent use of salicylic acid and salicin did not lower the temperature, which immediately after death indicated 111° F. The cold bath was not used. In his experience this drug produces no beneficial result either in the prevention or cure of pericarditis, pleuritic effusion, or chronic rheumatic pains. The use of salicylic acid and salicylate of soda has been assayed in other affections where inflammatory action of the mucous surfaces was accompanied by offensive discharges. These cases are few in number, but the result promises well for a more extended trial.

Pulmonary Gangrene. — A case is reported where, after the failure of large doses of quinine and inhalations of turpentine, fifteen grains of salicylic acid were prescribed during the day, and in three days the fetor had disappeared and the temperature had fallen from 39° C. to its normal point. The continuance of the drug in fifty-centigramme (seven-grain) doses was followed by diminished expectoration, disappearance of dullness at the apex of right lung, and restoration of the respiratory sound. After a few weeks' stay in the country, the patient returned without cough and in good flesh.

Catarrhal Stomatitis. — Five cases in which salicylic acid was used were absolutely free from ulcers on the mucous surface of the mouth and tongue in two days; and the disagreeable sensation of pain, etc., caused by the erosions rapidly ceased.

Dysentery. — In dysenteric inflammations accompanied with tenesmus and bloody stools every fifteen minutes, enemata every four hours of

Salicylic acid	1 gramme.
Distilled water	300 grammes.
Alcohol	q. s.

gave decided relief to the tenesmus, rapidly reducing the number of stools; the bloody and mucous discharges were replaced by yellow dejections; the appetite improved, and the normal temperature returned. The effect of the drug, as suggested by Berthold, is explained by its arresting fermentation and by the consequent suppression of ulceration and suppuration of the intestinal mucous surface.

The experiments of Dr. Ringer and Mr. Bury on healthy subjects directly prove that in order to obtain any symptom characteristic of the action of salicin, thirty or more grains must be taken hourly, or one single dose of sixty grains. In these subjects no effect on temperature was produced except what might be attributed to a slight fever induced by catarrhal inflammation of the primæ viæ. The sweat became alkaline or neutral, the pulse was quickened to 140 per minute, and its force was diminished. The symptoms of intoxication previously described by clinical observers as affecting the nerve centres was also noticed by the above experimenters.

PROCEEDINGS OF THE OBSTETRICAL SOCIETY OF BOSTON.

C. W. SWAN, M. D., SECRETARY.

OCTOBER 14, 1876. *Prolapse of the Cord.* — DR. MINOT reported the case. The patient, who had borne two children previously, was taken in labor early in the morning of July 31st. At five A. M., the os was found to be somewhat dilated, and a loop of the cord was felt pulsating just within it. At eight A. M., a large quantity of cord came down into the vagina, pulsating feebly and slowly. The membranes were entire. The patient was etherized, the whole hand was introduced into the vagina, the cord was pushed up and held above the head. The membranes were then ruptured, the head came down with the rush of liquor amnii, completely filling the pelvis, and no further trouble from the cord was experienced. The child was born at noon, in good condition. Dr. Minot said that he had once before treated a similar case in the same way, with like result.

Tedious and Difficult Labor. — DR. WELLINGTON reported the case. The patient, a stout, short person, thirty-five years of age, was taken in her first labor on Thursday evening, August 31st. She kept about the house till Saturday, when she took to her bed. Dr. Wellington first saw her Sunday evening, the pains having occurred throughout about every fifteen minutes, not very severe, but troublesome. The head was found presenting, very high, and the os was slightly dilated. The patient went on in the same way till

Tuesday noon, when the head had worked its way into the pelvis, where it lay with the face to the pubes. Dr. Marcy was asked to see the case, and he suggested turning the face to the sacrum. The patient having been etherized for the purpose, this was accomplished, after several ineffectual attempts, by combined external and internal manipulation. There was, however, no progress, and the forceps were put on. After an hour's hard work by both attendants, the head was delivered, and after this the shoulders gave considerable trouble in extraction. The child was not vigorous, but was ultimately restored. It weighed twelve pounds, and the sutures of the skull were firm, the bones scarcely lapping. It lived three days and had several convulsions, in one of which it died. No urine had been passed and none was found even in the bladder, the secretion having been entirely suppressed. The perinæum of the mother was ruptured to the sphincter ani. There was a deep laceration of the vagina, posterior and on the left side, three inches in length, and a less extensive one in the interior wall. Sutures were put into the perinæum and the patient was left. In two days the perinæum was looking black and gangrenous, and there was a copious, very offensive discharge. The stitches were removed. There was a good deal of pain and fever; the temperature was 102° F., and the pulse 120. The urine was drawn by catheter for three weeks, and the wounds were freely washed with solutions of carbolic acid. Tonics were administered. The patient is not yet well, but the case is apparently going to result much better than was feared at first.

A Case of Labor; the Child Hydrocephalic. — Dr. Tuck mentioned the case of a delicate, rather unhealthy-looking French woman, aged thirty-five, whom he attended in confinement. Early in the morning he found the os about an inch in diameter and the head presenting, but the latter did not feel exactly as it should, and Dr. Tuck questioned whether he had to do with a case of hydrocephalus. In the afternoon the pains, at first not very vigorous, gradually became stronger but without much effect on the progress of the labor. One drachm of the fluid extract of ergot was administered as a measure preliminary to the application of the forceps, but the latter were unnecessary as the pains soon become strong enough to expel the child. This was markedly hydrocephalic, and had spina bifida. It lived forty-eight hours. The mother did well.

Vaginismus traced to Spasmodic Turgescence of the Clitoris. — Dr. Chadwick read the case.

Repeated Miscarriages from Diseased Placenta. — Dr. Forster exhibited a fœtus and placenta recently delivered from a patient of whom, at meetings of the society, previous mention had been made as a subject of repeated miscarriages from diseased placenta, the present being the thirteenth instance in her case. The disease of the fœtus and placenta has been described as syphilitic, but the woman has never had any other evidence of symptoms of syphilis. Dr. Forster said that an anti-syphilitic treatment had been pursued, but irregularly, owing to the neglect by the patient of the directions given to her.

Dr. Fitz remarked that the appearances were quite similar to those of a year ago. The present specimen showed a marked constriction of the cord near its fœtal end, a peculiarity which has been associated with syphilitic

cases. The nodular condition of the placenta was more extreme than before, and the condition of the bones was of the same character. Dr. Fitz stated, in answer to a question, that the period of time between the death of the fœtus in utero and its birth is in part estimated by the maceration of the cuticle, the discoloration of the skin, and the laxness of tissues, due essentially to the displacement of fluid. In answer to another question, Dr. Fitz said that fatty degeneration of the placental villi as a cause of the death of the fœtus in Dr. Forster's case could be considered only as secondary, the primary state being a thickening and cellular infiltration of the villi.

Dr. Stedman said: Some months ago, in connection with specimens shown here of diseased placenta, I reported the case of a primipara whose urine was loaded with albumen and casts, and who had dropsy, vomiting, diarrhœa, and headache. The child was still-born at the eighth month, and the placenta was studded with caseous-looking masses. The patient recovered in good time. Last week I saw a woman at forty who had had four children, none living now. The complexion was pasty, with headache, much anasarca, urine heavy with albumen. She was confined at about the seventh month. The child, though puny, was lively, but died, twelve hours after birth, of hæmatemesis. The placenta had several large nodules in its substance, one of which I cut out and asked Dr. Edes to look at. He reported that the mass was one of dead placental tissue simply.

Dr. Abbot, in reference to the question how long an interval of time is necessary after the death of the fœtus to produce exfoliation of the cuticle, said that he was recently called to a patient about to be confined, who was very large and uncomfortable from excessive distention. On examination in the afternoon he heard the sounds of the fœtal heart distinctly; and the patient stated that she felt the motion of the child subsequent to the visit. On the second day after a large dead child, weighing about ten pounds, was born. In the process of delivery there was considerable delay in the passage of the shoulders, and when they at length came a sheet of cuticle was peeled from the entire abdomen. During three or four weeks before labor, dating from an attack of cholera morbus, the motions of the child had been growing gradually feeble, and for the last week had been scarcely perceptible. The sagittal suture was unusually wide, as if from distention by an excessive amount of serum in the brain, and the abdomen was somewhat enlarged. The child was plump, and there was no appearance of maceration of the cuticle. The labor was a hard one, there being scarcely any liquor amnii. From the positive data of this case the child could not have been dead more than thirty-six hours previous to delivery, and possibly not more than twenty-four.

Induced Labor for Obstinate Vomiting. — Dr. Minot reported the case, which was under the care of Dr. Wellington and himself. The patient was in an extremely nervous condition, with depression almost amounting to insanity. The vomition was uncontrollable, and it was thought that the induction of labor was necessary in order to save her life. Dilatation of the os with the finger was tried repeatedly without effect. The application of iodine to the cervix was also of no avail. Three sponge tents were then introduced, one

after the other, when labor came on, and the contents of the womb were expelled. All symptoms ceased, and the woman rapidly recovered. The same patient had suffered in a similar manner a few years ago, and was relieved by the same treatment, by Dr. Minot; but during her first pregnancy, about ten years ago, she was perfectly healthy. There was nothing abnormal in the condition of the cervix or os, so far as could be ascertained, while she was suffering from the nausea and vomiting.

Dr. Sinclair said that in the last number of the *British Medical Journal* the oxalate of cerium and Copeland's method were stated as the means most relied upon in such cases.

Dr. Lyman alluded to a case, to be reported hereafter, in which a pelvic peritonitis followed the introduction of the uterine sound.

Dr. Reynolds asked whether the fact of the introduction of the sound had necessarily any important bearing on the case. Might not the dilatation of the os by sponge tents be in itself enough to explain the history?

Dr. Sinclair stated that in two instances he had known sponge tents to produce similar effects, resulting in very severe attacks of pelvic peritonitis or peri-uterine inflammation, which in one of the cases proved fatal. He mentioned the case of a patient who took cold on a damp afternoon just at the close of a menstrual period. This resulted in severe pelvic inflammation, followed by purulent discharge from the rectum, with which the patient was sick several months. She was afterwards married, now many years since, but has never had children.

Dr. Wellington asked Dr. Lyman what he understood by the expression "taking cold."

Dr. Lyman responded that after improper exposure the perspiration was checked, the patient feeling a slight chill followed by a febrile reaction, symptoms which in popular parlance signify catching cold.

Dr. Reynolds said that he became daily more convinced of the paramount importance of securing to the lying-in patient repose, both of mind and body, to insure her a thoroughly good recovery.

Great concern is always shown to protect the lying-in woman against "taking cold." But in by far the greater number of cases accidents are to be attributed not so much to change of temperature as to early fatigue or to undue excitement.

A case of acute peritonitis, fatal on the third day, which came under his observation two years ago, strikingly illustrated the point in question. A young healthy primipara, confined in the depth of winter in a room without carpet or fire, had a moderate labor and was found on the third day after exceptionally comfortable; but shortly after the visit, probably from irritation at the neglect of those about her, she sprang out of bed, turned the mattress, and put the bed in order. Within an hour severe symptoms appeared, which rapidly increased till her death, three days later.

As an instance of gross disregard of that care which every such patient needs, and an example of the risk incurred by such exertions, the case had very much impressed him.

Dr. Wellington remarked that most diseases begin with a chill; on this

account their origin is usually attributed to exposure to cold, whereas in reality, in three fourths of the cases, no such exposure has taken place.

Dr. Bixby said that some few years ago, while he was treating a patient for what seemed to be an unusually mild form of endometritis, a chill occurred quite unexpectedly, with pain and tenderness in the abdomen, and the patient went through a severe attack of acute peritonitis, lasting four weeks, but finally made a good recovery. Later, while under the care of another physician, an attempt was made to cure the existing sterility and dysmenorrhœa by means of sea tangle tents. A sharp attack of peritonitis immediately followed, from which she recovered with difficulty. A third attack occurred within the last five months from exposure. Dr. Bixby found that this patient belonged to a family subject to peritonitis. Two sisters had died of the disease which, in one of them, had a puerperal origin.

Dr. Bixby remarked that some uteri which are fixed bear handling well, while others are to be managed with extreme caution, from the risk of setting up inflammation.

DERMATOLOGY.

The recent meeting of the American Dermatological Association, an account of which we gave in our last number, is an event of sufficient importance not to be passed over unnoticed by the medical profession. Of the many specialties which are represented by formally constituted bodies, none perhaps cover so wide a range of subjects of interest to different classes of practitioners as dermatology. The communications at the recent inaugural meeting are of value alike to the physician, the surgeon, the hygienist, and the scientist. A glance at the discussion will dispel illusions in regard to the supposed narrowness of the subject, and to the general practitioner it is suggestive of a knowledge of the nature and treatment of the diseases of this organ which we think have not been fully appreciated. There is a tendency among many physicians to undervalue the work of these specialists, and an indisposition to yield ground in this direction as they have already been obliged to in others. It is due largely to the fact that skin affections are probably more imperfectly understood and poorly treated than any other form of disease, and that many of these finally fall into the hands of the quacks. There is a fair prospect that the much-needed remedy has been applied, and that the profession in this country contains a sufficient number of highly educated and competent physicians to diffuse the necessary knowledge. Great progress has been made in the teaching of this branch during the last quarter of a century, as was pointed out by the president in his address, and as was amply shown by the work of the society.

In the skin we have a most convenient organ for the study of the natural history of disease and the changes produced by the action of numerous drugs. The facilities for this study are, however, not as great as they should be. We have nowhere such opportunities as are offered at the clinics of the great teachers of Europe, and our dermatologists have, as they assert, a just cause of complaint against many of our large hospitals for ignoring the necessity of providing for this class of disease on a scale which modern science demands.

We have reason to be proud of the work which these specialists have accomplished in spite of all obstacles. They have established the *Archives of Dermatology*, one of the best periodicals which we have. A member of the association has produced a text-book and atlas, which are standard volumes. A great deal of excellent scientific work has also been done. Their efforts should meet with the encouragement which is their due. The influence upon the profession at large of really good society work, such as has been accomplished at the late meeting, cannot fail to be beneficial, and we welcome with satisfaction the new comer in the ranks of our medical societies.

MEDICAL NOTES.

— We call attention to the notice elsewhere of the meeting of the censors of Suffolk District for the examination of candidates.

— *The Clinic* reports from the *London Medical Record* the statement of Professor Xavier Landerer, of Athens, that a very popular remedy against seasickness, in common use among the mariners in the Levant, is the daily internal use of iron. This is obtained in a very primitive way: a portion of the iron-rust adhering to the anchor and anchor-chain is scraped off and administered. At the same time a small pouch containing roasted salt and flowers of thyme is tied upon the region of the navel as firmly as can be borne. This is said to lessen and gradually to subdue the antiperistaltic motions of the stomach caused by the rolling of the vessel. This preparation was already known to the ancient Greeks as "thymian salt." M. Landerer says that he knows several seamen who have been cured by this treatment.

— Of two hundred persons belonging to the Russian Red Cross Society not less than forty are reported to have been killed during the performance of their duties in succoring the wounded and removing them from the field of battle. It seems incredible, says *The Lancet*, that at so early a period of the war so large a loss of life could have been experienced in carrying out this duty.

— *The Medical Times and Gazette* (September 1, 1877, page 239), commenting upon the recent deaths caused by chloroform, says: "But — and on this we would insist — *nothing will prevent deaths but a careful administration* in each and every case. Those who are giving the anæsthetic should do nothing else, and they ought always to bear in mind that they are administering a drug which is dangerous to human life and ought to act accordingly." Another very simple and thoroughly efficacious precaution suggests itself. *Punch's* advice to people about to marry was, Don't. We would similarly recommend to our English brethren to try abstention from the use of chloroform as an anæsthetic. Perhaps this novel idea, which does not seem to have occurred to the author of the remarks quoted above, may, if carried out, prevent the repetition of the deaths during anæsthesia which have lately been taking place with such startling frequency in England.

— Dr. A. Seeligmüller, in the *Medical Times and Gazette* of August 25, 1877, recommends the chlorate of potash in saturated solution as a specific remedy against diphtheria. His paper concludes with the following summary of his observations: —

(1.) The chlorate of potash administered in saturated solution (five per cent.) has a specific effect on diphtheria.

(2.) It must be given in a solution of ten grammes in two hundred grammes of distilled water, without adding any syrup or any other substance to ameliorate the taste.

(3.) This solution is to be ordered to infants under three years at half a spoonful, to elder ones at a whole spoonful, every two hours (if the malady is very grave, every hour), at first *day and night* without interruption.

(4.) This internal medication *alone* will suffice in all cases.

(5.) The saturated solution of chlorate of potash exercises (*a*) a topical action and (*b*) a general one on the diphtheritic process: (*a*) a topical one as a mild cautery, and by separating the diphtheritic pseudo-membranes from their basement membranes; (*b*) a general one, supplying the oxygen withdrawn from the blood corpuscles by bacteria, and destroying these organisms.

(6.) Caution is required lest the saturated solution may act dangerously on the heart or digestion. When such symptoms occur the administration must be suspended.

— We learn from *The Lancet* that the medical officers of the Russian army are forming a fund for the support of the widows and orphans of their brethren who may be killed, or otherwise succumb, during the war. The capital is to be formed by contributions on a given scale from the pay, and by a deduction of pay on appointment.

LETTER FROM LONDON.

Messrs. Editors, — In talking with one or two graduates and teachers of the Edinburgh University, I have learned of the existence there of an interesting regulation affecting the position of instructors, in the medical department at least, which obtains, so far as I know, scarcely anywhere else. It appears that besides the regularly appointed corps of teachers, any person, after proving himself to be properly qualified before a certain examining board, may open rooms and hold courses of lectures on any subject, attracting from the regular lecturers as many students, with their fees, as like to come to him, and his instruction must be accepted by the diploma-giving body as the equivalent of that provided at the established courses.

According to one of my informers, this regulation was pressed upon the university a number of years ago by the city government, rather against the will of the faculty, but is now almost universally admitted to be a source of vigor and progressiveness. Under the impersonal, and therefore merciless, judgment of the students, inefficient teachers gradually give place to better men, and strong workers, who feel that their merit is greater than their reputation, are attracted into the field.

This arrangement is not, at the same time, found to be so unfair towards the regularly appointed instructors as would at first appear. All the advantage which is given by prestige is on their side, and further, though they lose their fees on the defection of their students, they continue to receive their salaries.

In the London schools it often happens that the rising lecturers are forced,

for some years, to teach subjects in which they are not especially interested, passing from one to another, whereas in Edinburgh an able man has the whole field open to him at once. Thus a rising surgeon of Edinburgh said to me that, some years ago, he had been offered a position in one of the London hospital schools, but on learning that he would have to teach at first some branch, I forget which, from which his predecessors had passed on to something more to their taste, he declined the offer, saying that he had already been teaching anatomy for several years, and was about to take up surgery in the next.

The London fashion of having many small schools, each attached to a hospital, must, it would seem, be on the whole a good thing, both for the students in giving them greater opportunities for clinical study, and for the younger medical men in offering so many chances for advancement, but it is said to be objectionable in the respect that it makes it difficult for the really exceptional men to have the audiences which they deserve.

In Paris, on the other hand, where it is said upwards of seven thousand students of medicine congregate yearly, the evils of too great concentration are manifest. It is to be hoped that the plethora will be relieved somewhat by the opening of the new school at Lyons.

Yours truly,

JAMES J. PUTNAM.

LONDON, *August* 22, 1877.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING SEPTEMBER 8, 1877.

	Estimated Population, July 1, 1877.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1876.
New York	1,077,228	539	26.19	27.46
Philadelphia	850,856	274	16.74	22.88
Brooklyn	527,830	249	24.53	24.31
Chicago	420,000	150	18.57	20.41
Boston	363,940	163	23.29	23.39
Providence	103,000	48	24.23	18.34
Worcester	52,977	21	20.61	22.00
Lowell	53,678	15	14.53	22.21
Cambridge	51,572	22	22.07	20.54
Fall River	50,372	32	33.03	22.04
Lawrence	37,626	18	24.85	23.32
Lynn	34,524	12	18.07	21.37
Springfield	32,976	5	7.83	19.69
Salem	26,739	10	19.45	23.57

BOOKS AND PAMPHLETS RECEIVED. — The Medical Intelligencer, No. 4. Philadelphia: Lindsay and Blakiston.

A Condensed Classified List of Works on Medicine, Surgery, and the Collateral Sciences, many of them at greatly reduced prices. Philadelphia: Lindsay and Blakiston.

WE have received the Physician's Visiting List for 1878 from Messrs Lindsay and Blakiston, of Philadelphia. We have found it very convenient. It was the first and for many years the only book of the kind published in this country. For sale by booksellers and druggists, or mailed free of postage by the publishers.